DOCUMENT RESUME

ED 160 967 CG 012 924

AUTHOR	Fagot, Beverly I.
TITLE	The Consequences of Same-Sex, Cross-Sex, and Androgynous Preferences.
SPONS AGENCY	National Institutes of Health (DHEW), Bethesda, Md. Div. of Research Resources.
PUB DATE	22 Apr 78
GRANT	BRSA-RR07080
NOTE	12p.
EDRS PRICE	MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS	Behavior Patterns; *Child Development; Discriminatory Attitudes (Social); *Peer Acceptance; *Play; *Preschool Children; Preschool Education; Research Projects; *Sex Role; Social Attitudes; *Social Isolation

ABSTRACT

The sex role choices of preschool children were observed for two years in a free play situation to determine what the consequences of such choices are for the types of play chosen and for social behaviors. The sex role factor was plotted on four quadrants: Masculine (M), Feminine (F), Androgynous and Low on both M and F (LMF). The children who chose non-traditional sex role behavior patterns pay a price in social consequences for their particular choices. Children in the Low M/F category played alone more often and received significantly fewer positive peer and teacher reactions than children in the other three quadrants. Children in the androgynous category received less peer reaction than children in the M or F quadrants but more than children in the LMF quadrant. Androgynous children received more negative peer feedback than children in the other three quadrants. (BN)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED160967

The Consequences of Same-sex, Cross-sex, and Androgynous Preferences in Early Childhood

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

B Fagot

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

Beverly I. Fagot

University of Oregon

Presented at Western Psychological Association, San Francisco, CA, April 19-22, 1978

Controversy over the necessity of learning appropriate sex typing continues within the psychological literature. With techniques available to modify cross-gender behavior in children, the discussion has left the realm of theorizing and entered into the practical arena of clinical ethics. Unfortunately we have very little data concerning the consequences for the child of choosing culturally accepted sex role not congruent with biological sex, or a cross-sex-preference or an androgynous mode, with high scores on both masculine and feminine behavior.

Generally with children, the assumption is that the adoption of culturally accepted sex roles makes it easier for the child to get along with the world (Evans and McCandless, 1978). Fagot (1977) found that preschool age boys showing moderate cross gender behavior received less positive and more negative peer reaction than other boys in their class. Cross gender preference did not affect peer behavior towards girls.

In most studies of sex-role preferences in children, it is difficult to know what effect sex role preferences have on choice of other play behaviors or on social and cognitive behaviors. There are suggestions that for girls the ability to play with masculine as well as feminine toys may positively affect spatial abilities and that play choices may influence later academic and career interests (Fagot and Littman, 1976; Tyler, 1964). Boys who show interest in school related activities that are often considered feminine do get more positive reinforcement from teachers (Fagot, 1977; Fagot and Patterson, 1969).

For adults there is evidence that androgynous choices by both men and women result in people more capable and flexible so that a wider range of careers and personal lifestyles remain open (Bem, 1974). Certainly there is a long history of data showing that brighter and more highly educated individuals of both sexes show characteristics of the opposite sex as well as their own (Terman and Miles, 1936). However, it is quite unclear how androgynous choices develop, when they develop, and what the consequences of such choices are for the child.

The present study is an attempt to look at sex role choices of preschool children to determine what the consequences of such choices are for the types of play chosen, and for social behaviors. I want to point out that this is not a study using test items (a child's form of the Bem, for instance), but is instead a study of play choices in a naturalistic free play setting.

Methods

Subjects

Sixty-seven children, aged 18 months to 58 months participated in this study.

GG012924

Thirty-two of the children were boys and 35 were girls. The children were solicited from newspaper ads offering 4 hours of supervised free play per week in return for permission to observe. The socioeconomic background of the children varied; sixty of the children came from intact families, and had previous day care experience. Basically, these were home reared children. Sixty of the children were white, 2 were black, 2 Mexicanamerican, and 1 Asian-american.

Behavior check list

A list of 33 child behaviors, and 15 teacher and peer reactions were used for this study. The list is presented in Table 1.

Procedure

The children were seen in two different classes (two classes were run throughout the study), with approximately 12 children, equally divided between boys and girls, in each class. Two undergraduate students served as teachers throughout the term. The study continued over a two-year period, divided into 7 ten week terms corresponding to the university school year.

The room was approximately 20 by 25 ft, equipped with standard preschool equipment. Observers were in an observation room with a separate entrance and observed through a one way mirror. Teachers were instructed to let the children choose their own activities, and to interfere only when a child was obviously distrubed. The teachers did provide varied activities each day, which were placed on tables or the floor for children to choose, but no attempt was made to have each child sample all activities.

Two hours of observation were completed each session. Children were observed in a predetermined order, once every five minutes. Each child was observed for five seconds, with the child behavior, the reactors, and then the reaction being coded. All children participated in the study for at least one ten week term so that each child in the study was observed for at least 40 hours, 12 observations per hour. Many children remained in the play groups for more than one term so the data can be examined for any changes.

Observers were trained using video tapes. Reliabilities using video tapes and during spot checks in the observation room exceeded 90% agreement for the child behaviors and 75% for the reactions. A total of 21 observers participated at different times during the study.

Results

Factor analysis of behavior choices

A score for each child on each behavior was obtained by dividing the number of observations that a child was observed in that behavior by the total number of observations for that child. There were 33 behavior scores for each child in the study. Correlations of all possible pairs of behaviors were carried out on these scores and the resulting correlation matrix was factor analyzed with seven factors resulting, accounting for 94.2% of the variance. The factors and behavior loadings were summarized in Table 2. Tentative factor descriptions have been placed on each factor.

It should be made clear that seven factor scores can be obtained for each of the seven 10 week terms. One important methodological question concerns the stability of factor scores over terms. This was measured by correlation of factor scores for all children seen in at least 2 terms for all pairs of terms. Reliability was high (over .70) over a period of a year and even over the two year period reasonably stable correlations (over .40) were obtained. This was despite the fact that few children remained in the sample over the entire two year period.

Sex role factors

Two factors contained behaviors which were sex-preferred, that is, they had significantly different frequencies by boys and girls tested on a term by term basis using two-way (class, sex) ANOVAs. One factor included masculine preferred behaviors and accounted for 12% of the variance. This is factor 4 in Table 2. The other factor included feminine preferred items and accounted for 7% of the variance. This was factor 7 in Table 2.

The factor scores for all children were plotted using their scores on these two factors. Factor 4 represented the vertical axis and Factor 7 the horizontal. Table 3 summarizes the placement of the children into the quadrants. The quadrants were defined as follows: masculine (high factor 4, low 7), feminine (low factor 4, high 7), androgynous (high both factors), and low-low (low both factors). The children to be discussed today are those children at least one standard deviation from the mean on one of the factors. This included 37 children from the original sample of 67 children.

Difference in other play behaviors

One-way analyses of variance among the children in the four different quadrants on the sex role factors were carried out on the factor scores for the five remaining factors. There were no differences on Factors 2 (social, cooperative behaviors) and 3 (verbal and motor activity level). However, there were significant differences on Factors 5 and 6. Children who were high on the feminine factors were less likely than all other children to exhibit high factor scores on passive withdrawn behaviors (Factor 5). Children showing traditional feminine choices also had significantly lower scores on Factor 1 (a high complexity task factor) and Factor 7 (a rather confusing factor with tasks and low activity level). These results are summarized in Table 4.

Peer and teacher reactions

When the social consequences of particular sex role choices are examined it can be seen that children who choose non-traditional sex role behavior patterns pay a price. The 15 reactions were categorized into positive and negative teacher responses, positive and negative peer responses, and child plays alone. Proportion scores were computed by taking the number of times a child was reacted to in one of the five categories divided by total number of observations (the proportions do not add to 10 because not all reaction categories were considered in this analysis). One-way analyses of variance were carried out on each of the five reaction categories among the four different quadrants.

Children who were in the low-low category played alone more often, and recieved significantly less positive peer and teacher reactions than children in the other three quadrants. Children in the androgynous category received

less peer reaction than children in the masculine and feminine quadrants, but more than children in the low-low quadrant. Androgynous children received more negative peer feedback than children in the other three quadrants. The results are summarized in Table 5.

Children showing cross-sex behavior

Three children, a girl and two boys showed cross-sex preferences in that they were in a quadrant defined by preferences of the opposite sex. The social consequences for these children were examined by comparing the proportion of times they received reactions in the five reaction categories to the mean proportion for others of the same sex within their class. The girl did not differ from other girls in her class on the kinds of reactions she received. However, the boys were more likely to play alone than other boys, and recieved less positive feedback than other boys in their class.

Discussion

It is clear that adoption of certain types of sex role behaviors have social consequences for young children in terms of peer and teacher reaction. Children who adopt traditional models are more socially acceptable to their peers.

The study does raise several questions concerning sex-role choices. First, why were there more boys choosing an androgynous mode than girls? Perhaps the fact that teachers encourage some feminine preferred behaviors, such as art activities, for both boys and girls may help account for the difference. Girls are not encouraged to try out masculine behaviors by teachers or peers so they may not ever come into contact with activities which they might enjoy. Second, what does the choice of a low-low pattern mean? These children did not differ from others in demographic or intellectual variables, but certainly the feedback they received from the teachers and peers is more negative. The final question is, "does early childhood sex preference relate to later sex stereotyped measures, such as Bems"? To put it differently, is there continuity between sex role choices in early development and in later development? We do not really know, but this data suggest stability over a one year period. This study is continuing so more longitudinal data is being collected, so that an adequate two year follow-up will be available. However, the lack of relation between lab measures and free play data makes it difficult to follow the children past preschool. It may be that stereotype measures such as the Bem are tapping different aspects and so that high correlations would not be expected. This problem is receiving continuing study in our lab.

References

Bem, S. L. The measurement of psychological androgyny. J. Consulting & Clinical Psychology, 1974, 42, 155-162.

Evans, E. D. & McCandless, B. R. Children & Youth: Psychological Development. New York: Holt, Rinehart & Winston, 1978.

Fagot, B. I. Consequences of moderate cross-gender behavior in preschool children. Child Development, 1977, 48, 902-907.

Fagot, B. I. & Littman, I. Relation of preschool sex typing to intellectual preferences in elementary school. Psychological Reports, 1976, 39, 699-704.

Fagot, B. I. & Patterson, A. R. An *in vivo* analysis of reinforcing contingencies for sex role behaviors in the preschool. Developmental Psychology, 1969, 1, 563-568.

Terman, L. & Miles, C. C. Sex and personality: Studies in masculinity and femininity. New York: McCraw Hill, 1936.

Tyler, L. E. The antecedents of two varieties of vocational interests. General Psychology Monographs, 1964, 70, 177-227.

Footnote

Data analyses for this study were supported by BRSA Grant RR 07080 awarded by the Biomedical Research Support Program, Division of Research Resources, National Institutes of Health.

Table 1

Observation schedule - Play styles

Revised 8/77

B. I. Fagot
WPA 1978

Child Behaviors

1. Rough and tumble play (Wrestling, running, etc.)
2. Climb, slide
3. Manipulate or look at objects - no particular type of play
4. Art activities (draw, color, paint)
5. Play with clay
6. Design boards, puzzles, lego, etc
7. Build with small blocks, set up farms, villages
8. Play with large blocks
9. Play with transportation toys
10. Play puppets
11. Play dolls, house, rehearse domestic activities
12. Play with ball, throw frisbee
13. Dress up
14. Fantasy play
15. Sing, listen to records
16. Look at books, listen to story
17. Look at, watch person
18. Talk, carry on conversation, touch, make social contact in some way
19. Demand attention
20. Crying, whining
21. Help at a task
22. Sit and do nothing, fidget, follow teacher
23. Take object, invade another's territory, throw objects
24. Hit, push, shove
25. Verbal aggression, yell, scream, criticize
26. Receives aggression (physical or verbal)
27. Hide
28. Play in wagon
29. Hammering - carpentry play
30. Child in transition
31. Dancing
32. Organized games
33. TV, radio, camera

Actor

A. Boy or boys
B. Girl or girls
C. Mixed sex group
D. Teacher 1
E. Teacher 2 (teachers will be assigned code)
F. Teacher 3

Reactions

1. Initiate behavior
2. Comment favorably - positive feedback
3. Hug, physical affection
4. Criticizes - punishes
5. Physical restraint or aggression
6. Child is ignored
7. Child is helped, given information
8. Close physical proximity, but not interaction of any kind
9. Parallel play, no interaction but involved in same activity
10. Child is imitated
11. Child is looked at, eye contact
12. Verbal interaction - talks together, conversation
13. Cooperative play - work together on a single task
14. Child continues alone
15. Associative play, interaction, but not necessarily same activity or cooperative

1

Table 2

Factor Definitions (items with loadings over ± .30)

Factor		
.57	Play with clay	+ high cognitive complexity
.3	Design boards	
.48	Build small blocks	
.70	Build large blocks	
.70	Play puppets	
.53	Look at books	
.45	Demand attention	
.32	Help at task	
-.59	Child in transition	
-.36	Play toy camera, camera, radio	

Factor 2		
-.43	Manipulate objects	
.83	Fantasy play	+ high social cooperation
-.55	Look at person or object	
-.30	Demand attention	
-.41	Do nothing; fret	
.31	Play in wagon	
.36	Dance	
.59	Organized games	

Factor 3		
.77	Rought& tumble play	+ high active motor-verbal
.40	Climb, slide	
-.30	Art activities	
.64	Talk, carry on converaation	
.30	Demand attention	
.30	Help at task	
.56	Verbal aggression	
-.33	Play TV, camera, radio	

Factor 4		
.37	Play transportation toys	
-.35	Look at person	+aggressive masculine
.30	Cry, whine	
.90	Take object	
.58	Hit, push, shove	
.33	Camera, TV, radio	

Factor 5		
-70	Art activities	
.46	Do nothing	+ passive, nontask
.67	Receives aggression	
.53	Hide	

Factor 6

-.34	Climb, slide	+ task involved; low activity
.57	Design boards	
.45	Transportation toys	
.68	Sing, listen to records	
-.41	Look at object or person	

Factor 7

.33	Art activities	+ feminine
.65	Play dolls	
.59	Dance	

Table 3

Distribution of Children in Sex-Role Quadrants

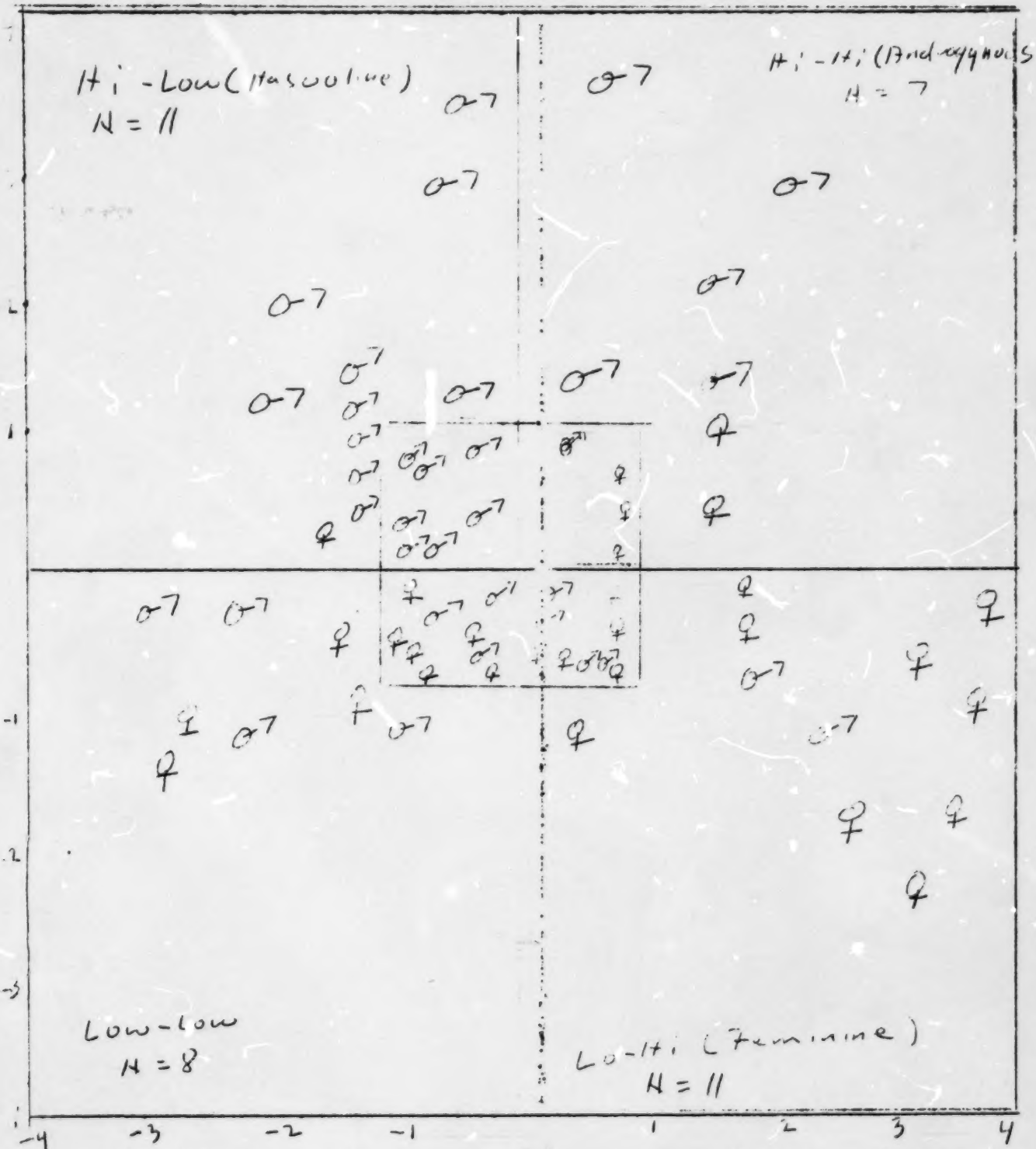

Table 4

Relation of style of play to sex-role choices

	Low-Hi	Hi-Hi	Hi-Low	Low-Low
Factor 1	-.69*	-.19	.12	.11
Factor 2	-.13	-.19	-.23	-.02
Factor 3	-.35*	.23	.37	.08
Factor 5	-2.10**	-.67	1.79**	1.24
Factor 6	-1.55*	-.22	.81	.22

*Differs from other three quadrants
** Differs from Low-Hi and Hi-Hi

Table 5

Relation of Sex Role Choice to Social Consequences

	Low-Hi	Hi-Hi	Hi-Low	Low-Low
Play alone	.340	.360	.310	.421*
Teacher Positive	.170	.180	.140	.090*
Teacher Negative	.011	.030	.020	.021
Peer Positive	.195	.141**	.170	.105*
Peer Negative	.012	.040*	.010	.016

*Differs from other three quadrants
** Differs from Low-Hi and Hi-Low